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मानक

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Mazdoor Kisan Shakti Sangathan

“The Right to Information, The Right to Live”

“पुराने को छोड़ नये के तरफ”

Jawaharlal Nehru

“Step Out From the Old to the New”

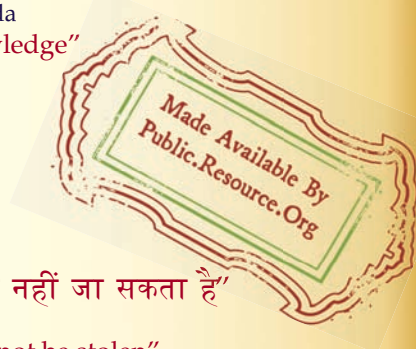
IS 1262 (1979): Abrasive Specialities (Bonded) [PGD 9: Abrasives]



“ज्ञान से एक नये भारत का निर्माण”

Satyanarayan Gangaram Pitroda

“Invent a New India Using Knowledge”



“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”

Bhartrhari—Nitiśatakam

“Knowledge is such a treasure which cannot be stolen”



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Indian Standard

( Reaffirmed 2005 )

# SPECIFICATION FOR ABRASIVE SPECIALITIES ( BONDED ) ( First Revision )

## 1. Scope — Covers the dimensions and requirements for the following abrasive specialties:

- a) Rectangular sharpening stones ( plain and combination );
- b) Sticks ( square, triangular, round and half-round );
- c) Scythe stones;
- d) Slip stones;
- e) Rubbing bricks; and
- f) Reaper files.

## 2. Types

2.0 The following types shall be considered as standard, the basis of classification being the grit of the abrasive materials used.

### 2.1 Rectangular Sharpening Stones, Sticks, Scythe Stones, Slip Stones and Reaper File

| Type       | Grit          |
|------------|---------------|
| Coarse     | 80 - 120      |
| Medium     | 150 - 180     |
| Fine       | 220 - 320     |
| Extra fine | 400 and finer |

Note — Combination stones are usually available only in a combination of coarse and fine.

### 2.2 Rubbing Bricks

| Type         | Grit          |
|--------------|---------------|
| Extra coarse | 20 - 30       |
| Coarse       | 36 - 46       |
| Medium       | 60 - 80       |
| Fine         | 120 - 320     |
| Extra fine   | 400 and finer |

## 3. Abrasive and Bond

3.1 The abrasive material used shall be either silicon carbide or aluminium oxide, as specified by the purchaser.

3.2 The bond used shall be of the vitrified type, but subject to agreement between the purchaser and the supplier, resin, silicate or shellac bond may also be used.

## 4. Shapes and Dimensions

4.1 The shapes and dimensions of the abrasive specialties shall be as given in Tables 1 to 9 except for reaper file.

Adopted 30 October 1979

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Price Rs 8.00

Gr 4

**TABLE 1 DIMENSIONS FOR PLAIN RECTANGULAR SHARPENING STONES**

( Clause 4.1 )

All dimensions in millimetres.



| Designating Size | $L$ | Tolerance on $L$ | $b$ | Tolerance on $b$ | $S_1$ | Tolerance on $S_1$ |
|------------------|-----|------------------|-----|------------------|-------|--------------------|
| 1                | 100 | $\pm 3$          | 25  | $\pm 1$          | 6     | $\pm 0.5$          |
| 2                | 125 | $\pm 3$          | 50  | $\pm 2$          | 20    | $\pm 1$            |
| 3                | 140 | $\pm 4$          | 50  | $\pm 2$          | 25    | $\pm 1$            |
| 4                | 200 | $\pm 4$          | 50  | $\pm 2$          | 25    | $\pm 1$            |

**Designation:**

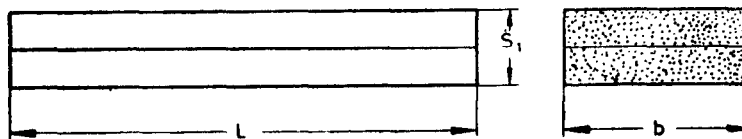
A plain rectangular sharpening stone of designating size 2 and conforming to this standard shall be designated as:

Plain Rectangular Sharpening Stone 2 IS : 1262

**TABLE 2 DIMENSIONS FOR COMBINATION RECTANGULAR SHARPENING STONES**

( Clause 4.1 )

All dimensions in millimetres.



| Designating Size | $L$ | Tolerance on $L$ | $b$ | Tolerance on $b$ | $S_1$ | Tolerance on $S_1$ |
|------------------|-----|------------------|-----|------------------|-------|--------------------|
| 1                | 125 | $\pm 3$          | 50  | $\pm 2$          | 20    | $\pm 1$            |
| 2                | 150 | $\pm 4$          | 50  | $\pm 2$          | 25    | $\pm 1$            |
| 3                | 200 | $\pm 4$          | 50  | $\pm 2$          | 25    | $\pm 1$            |

**Designation:**

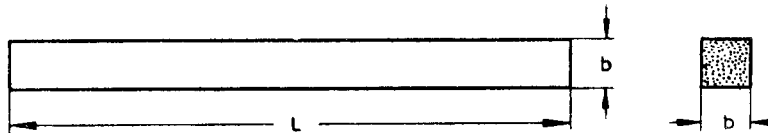
A combination rectangular sharpening stone of designating size 2 and conforming to this standard shall be designated as:

Combination Rectangular Sharpening Stone 2 IS : 1262

**TABLE 3 DIMENSIONS FOR SQUARE STICKS**

( Clause 4.1 )

All dimensions in millimetres.



| Designating Size | L   | Tolerance on L | b  | Tolerance on b |
|------------------|-----|----------------|----|----------------|
| 1                | 100 | $\pm 3$        | 6  | $\pm 0.3$      |
| 2                | 100 | $\pm 3$        | 10 | $\pm 0.5$      |
| 3                | 100 | $\pm 3$        | 13 | $\pm 1$        |
| 4                | 150 | $\pm 4$        | 10 | $\pm 0.5$      |
| 5                | 150 | $\pm 4$        | 13 | $\pm 1$        |
| 6                | 200 | $\pm 4$        | 20 | $\pm 1$        |

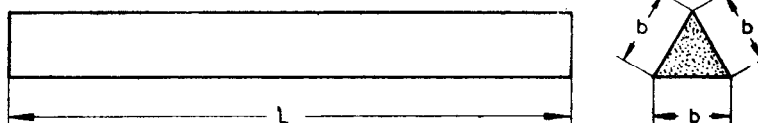
**Designation:**

A square stick of designating size 6 and conforming to this standard shall be designated as:  
Square Stick 6 IS : 1262

**TABLE 4 DIMENSIONS FOR TRIANGULAR STICKS**

( Clause 4.1 )

All dimensions in millimetres.



| Designating Size | L   | Tolerance on L | b  | Tolerance on b |
|------------------|-----|----------------|----|----------------|
| 1                | 100 | $\pm 3$        | 6  | $\pm 0.5$      |
| 2                | 100 | $\pm 3$        | 10 | $\pm 0.5$      |
| 3                | 150 | $\pm 4$        | 10 | $\pm 0.5$      |
| 4                | 150 | $\pm 4$        | 13 | $\pm 1$        |
| 5                | 150 | $\pm 4$        | 20 | $\pm 1$        |
| 6                | 200 | $\pm 4$        | 25 | $\pm 1$        |

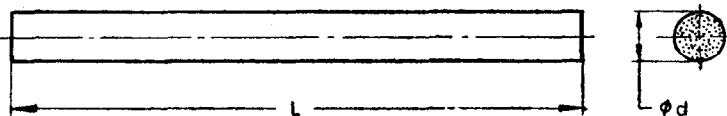
**Designation:**

A triangular stick of designating size 4 and conforming to this standard shall be designated as:  
Triangular Stick 4 IS : 1262

**TABLE 5 DIMENSIONS OF ROUND STICKS**

( Clause 4.1 )

All dimensions in millimetres.



| Designating Size | $L$ | Tolerance on $L$ | $d$ | Tolerance on $d$ |
|------------------|-----|------------------|-----|------------------|
| 1                | 100 | $\pm 3$          | 6   | $\pm 0.5$        |
| 2                | 100 | $\pm 3$          | 10  | $\pm 0.5$        |
| 3                | 150 | $\pm 4$          | 10  | $\pm 0.5$        |
| 4                | 150 | $\pm 4$          | 13  | $\pm 1$          |
| 5                | 200 | $\pm 4$          | 25  | $\pm 1$          |

**Designation:**

A round stick of designating size 3 and conforming to this standard shall be designated as:

Round Stick 3 IS : 1262

**TABLE 6 DIMENSIONS OF HALF-ROUND STICKS**

( Clause 4.1 )

All dimensions in millimetres.



| Designating Size | $L$ | Tolerance on $L$ | $S_1$ | Tolerance on $S_1$ | $b$ | Tolerance on $b$ |
|------------------|-----|------------------|-------|--------------------|-----|------------------|
| 1                | 100 | $\pm 3$          | 6     | $\pm 0.5$          | 2.5 | $\pm 0.5$        |
| 2                | 100 | $\pm 3$          | 10    | $\pm 0.5$          | 4   | $\pm 0.5$        |
| 3                | 150 | $\pm 4$          | 10    | $\pm 0.5$          | 4   | $\pm 0.5$        |
| 4                | 150 | $\pm 4$          | 13    | $\pm 1$            | 5.5 | $\pm 0.5$        |
| 5                | 200 | $\pm 4$          | 25    | $\pm 1$            | 12  | $\pm 1$          |

**Designation:**

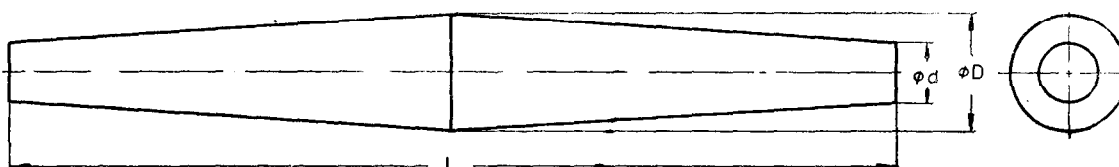
A half-round stick of designating size 4 and conforming to this standard shall be designated as:

Half-Round Stick 4 IS : 1262

**TABLE 7 DIMENSIONS OF SCYTHE STONES**

( Clause 4.1 )

All dimensions in millimetres.



| Designating Size | L   | Tolerance on L | D  | Tolerance on D | d  | Tolerance on d |
|------------------|-----|----------------|----|----------------|----|----------------|
| 1                | 300 | $\pm 5$        | 40 | $\pm 2$        | 20 | $\pm 1$        |

**Designation:**

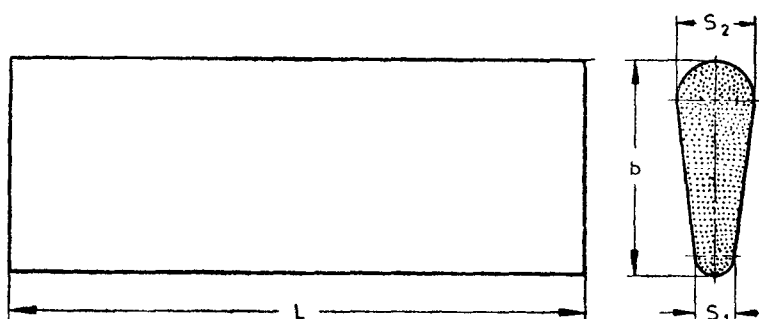
A scythe stone of designating size 1 and conforming to this standard shall be designated as:

Scythe Stone 1 IS : 1262

**TABLE 8 DIMENSIONS OF SLIP STONES**

( Clause 4.1 )

All dimensions in millimetres.



| Designating Size | L   | Tolerance on L | b  | Tolerance on b | S  | Tolerance on S <sub>1</sub> | S <sub>2</sub> | Tolerance on S <sub>2</sub> |
|------------------|-----|----------------|----|----------------|----|-----------------------------|----------------|-----------------------------|
| 1                | 100 | $\pm 3$        | 25 | $\pm 1$        | 5  | $\pm 0.5$                   | 11             | $\pm 1$                     |
| 2                | 150 | $\pm 4$        | 56 | $\pm 2$        | 10 | $\pm 0.5$                   | 20             | $\pm 1$                     |

**Designation:**

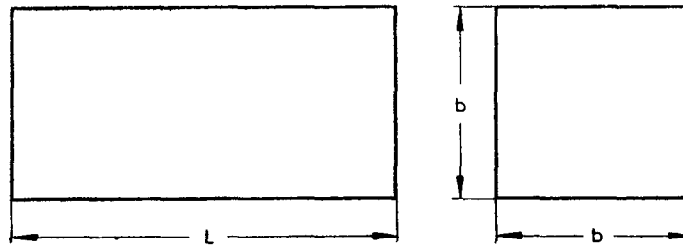
A slip stone of designating size 2 and conforming to this standard shall be designated as:

Slip Stone 2 IS : 1262

**TABLE 9 DIMENSIONS OF RUBBING BRICKS**

( Clause 4.1 )

All dimensions in millimetres.



| Designating Size | L   | b  |
|------------------|-----|----|
| 1                | 100 | 50 |
| 2                | 150 | 50 |

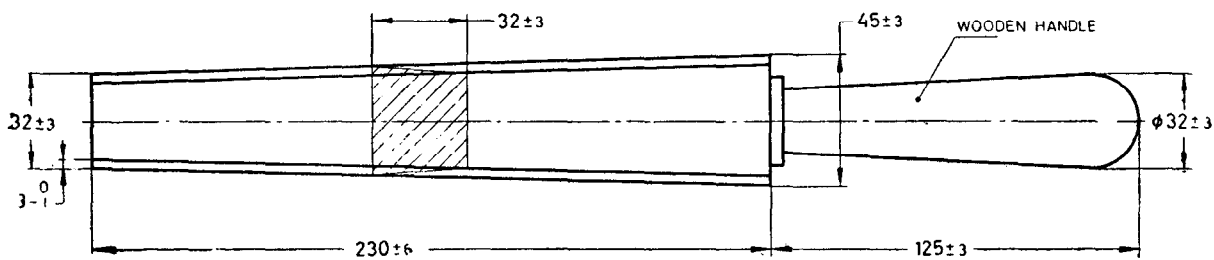
**Note** — The tolerance on any dimension shall not exceed  $\pm 5$  percent subject to a maximum of  $\pm 3$  mm.

**Designation:**

A rubbing brick of designating size 1 and conforming to this standard shall be designated as:

Rubbing Brick 1 IS : 1262

4.2 The reaper file shall be as illustrated in Fig. 1 and shall be provided with a handle.



All dimensions in millimetres.

**FIG. 1 REAPER FILE****Designation:**

A reaper file with dimensions as specified in Fig. 1 and conforming to this standard shall be designated as:

Reaper File IS : 1262

4.2.1 The timber used for handle of reaper file shall conform to any of the timbers as specified in Table 4 of IS : 620-1975 'General requirements for wooden tool handles (third revision)'.

**5. Performance Test**—The bonded stone shall withstand a practical trial in consistence with its normal use.

**6. Marking** — The abrasive specialities shall be legibly marked with the following:

- a) Designating size;
- b) Abrasive;
- c) Type (for example, coarse, medium or fine); and
- d) Manufacturer's name or trade-mark.

**6.1 ISI Certification Marking** — Details available with the Indian Standards Institution.

**7. Packing** — Each abrasive speciality shall be wrapped in paper to avoid soiling of its face by direct contact with the packing medium. Where cardboard or similar type of cartons are used, wrapping in paper may be dispensed with. A suitable number of items of the same type and size shall be packed face to face in a case. A suitable layer of cushioning material shall be kept between items and case, so as to avoid damage during handling.

## EXPLANATORY NOTE

This standard was first published in 1958. This revision has been necessitated mainly to delete the equivalent inch dimensions specified in it. Moreover, it has been observed that the industry has completely switched over to metric dimensions as far as abrasive specialities are concerned.